UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,879	03/15/2004	Eric Kauffman	250050US6YA	8333

22850 7590 12/31/2008

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER	
SHEIKH, ASFAND M	

ART UNIT	PAPER NUMBER
3627	

NOTIFICATION DATE	DELIVERY MODE
12/31/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No.	Applicant(s)	
	10/799,879	KAUFFMAN ET AL.	
	Examiner	Art Unit	
	Asfand M. Sheikh	3627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/3/2006 and 11/12/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-15 are rejected under 35 U.S.C. 101. Based on Supreme Court precedent and recent Federal Circuit decisions, a 35 U.S.C § 101 process must (1) be tied to a particular machine or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. In re Bilski et al, 88 USPQ 2d 1385 CAFC (2008); Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780,787-88 (1876).

An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the particular machine to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Here, applicant's method steps are not tied to a particular machine and do not perform a transformation. Thus, the claims are non-statutory.

The mere recitation of the machine in the preamble with an absence of a machine in the body of the claim fails to make the claim statutory under 35 USC 101. *Note the Board of Patent Appeals Informative Opinion Ex parte Langemyer et al.*

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 7, 12, 14-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Miller et al. (US 6,697,691 B1).

Claim 1, 2, 7, 12, 14-20

Miller discloses a method of correcting a fault in a process tool for semiconductor manufacturing (see at least, abstract and FIG. 5) comprising: collecting old service activity data for old faults in said process tools (see at least, col. 2, lines 5-12 and col. 6, lines 19-40: the examiner notes fault detection model data is interpreted to be old service activity data); receiving new service activity data for new fault in said process tool comparing said new service activity data to said old service activity data (see at least, col. 2, lines 5-12 and col. 6, lines 19-40: the examiner notes received production data is interpreted to be new service activity data and finding a difference between the data); identifying matching service activity data from said comparison (see at least, FIG 5: the examiner notes identifying probable cause(s) of failure); and performing a corrective action based on said matching service activity data (see at least, col. 7, lines

10-30: the examiner notes a lamps can be changed or tools can be recalibrated are interpreted to be identifying a service activity from the comparison of data and FIG. 5).

Further Miller discloses [claim 2 and 19] performing one or more tests on said process tool using said matching service activity data in order to generate new matching service activity data, wherein said new matching service activity data narrows said matching service activity data (see at least, col. 7, lines 31-40: the examiner notes further comparisons of production data files against fault detection modules are performed until all are exhausted and then performing correction (see FIG. 5)) and [claim 7] wherein said performing said corrective action includes replacing one or more manufacturing (MS) part in said process tool (see at least, col. 7, lines 10-30: the examiner notes a lamps can be changed or tools can be recalibrated are interpreted to be identifying a service activity from the comparison of data and FIG. 5) and [claim 12 and 20] wherein said collecting said old service activity data for said process tool includes collecting old service activity data for at least a thermal system (see at least, col. 7, lines 10-30: the examiner notes by being able to correct for lamps in rapid thermal process, thermal activity data would have to be collected and used for said comparison of data) and [claim 14]: wherein performing a correction action comprises providing service action data to a service operator to assist the service operation in correcting said fault in said process tool (see at least, col. 6, lines 65-col. 7, lines 10) and [claim 15] wherein said performing a corrective action comprises isolating said fault in said process tool (see at least, col. 6, lines 65-col. 7, lines 30).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3-6, 8-11, and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al. (US 6,697,691 B1) in view of Examiner's Official Notice.

Claims 3-6 and 8-11

Miller fails to disclose ranking of tests/MS part replacements according to given condition (pass/fail)/(increases/decreases).

The examiner takes Official Notice that it is old and well known in the analysis arts to provide ranked data with respect to analyzing a given set of data according to any condition based on the use of data manipulation (e.g. ranking data based on comparisons and providing data in a ranked fashion based on the comparison data more specifically as an example comparing crime between cities and then ranking crime as it increases or decreases per city in a ranked fashion).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Miller to include the features as taught by the Examiner's Official Notice for the purpose of providing data in an easy to understand manner which allows for easier interpretation of the data.

Claim 13

Miller fails to disclose wherein said performing a corrective action comprises automatically controlling said process tool to correct said fault therein.

The examiner takes Official Notice that it is old and well known in the automation arts to automatically take actions without user intervention to correct or adjust data (e.g. having a system automatically monitor and make changes to the system's architecture for better performance more specifically as an example having a detection system make changes to a network to increase speed and efficiency without intervention of a user).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Miller to include the features as taught by the Examiner's Official Notice for automating corrective measures thereby increasing efficiency of the system without providing burden to an operator.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Asfand M. Sheikh whose telephone number is (571)272-1466. The examiner can normally be reached on 9a-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ryan M. Zeender can be reached on (571)272-6790. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Asfand M. Sheikh/
Examiner, Art Unit 3627
12/18/2008